CHAPTER 7.0 LIST OF MITIGATION MEASURES AND ENVIRONMENTAL DESIGN CONSIDERATIONS

7.1 Mitigation Measures

7.1.1 Aesthetics

M-AE-1

To mitigate for impacts to the visual character of SR 76 along the project boundary (AE – 1), a 100-foot wide easement shall be placed along the project frontage with SR 76. The easement will be located on lots 5, 6, 15, 16 and 30. The specific purpose of the easement will be to maintain groves to screen residences from view for travelers on SR 76. Lot 30 encompasses both grove trees and oaks. The oaks will not be disturbed as part of the project and will be retained within the easement.

7.1.2 Air Quality

M-AQ-1 and M-AQ-2

In Order to mitigate for emissions of PM_{10} and diesel particulate matter, the project shall comply with the following Air Quality measures:

- a. All haul/dump trucks entering or leaving the site with soil or fill material must maintain at least 2 feet of freeboard or cover loads of all haul/dump trucks securely (unnumbered design measure).
- b. Dust control measures of the Grading Ordinance will be enhanced with a minimum of three (3) daily applications of water to the construction areas, between dozer/scraper passes and on any unpaved roads within the project limits.
- c. Grading is to be terminated in winds exceed 25 mph.
- d. Sweepers and water trucks shall be used to control dust and debris at public street access points.
- e. Dirt storage piles will be stabilized by chemical binders, tarps, fencing or other suppression measures.
- f. Internal construction-roadways will be stabilized by paving, chip sealing or chemicals after rough grading.
- g. A minimum of four 15-mph signs shall be posted and enforced on unpaved areas during construction.
- h. Electricity from the utility grid shall be used to power construction equipment to the maximum extent feasible.

The applicant shall comply with the Air Quality requirements of this condition. The following actions shall occur throughout the duration of the grading construction. The County shall make sure that the grading contractor complies with the Air Quality

requirements of this condition. The County building inspection department shall contact the Department of Planning and Development Services for referral to Code Enforcement if the applicant fails to comply with this condition.

7.1.3 Biology

M-BI-1 LBV and SWF Nesting/Breeding Season Mitigation

(Impacts BI-1 and BI-3) Because the project site is considered potentially occupied by Least Bell's Vireo and Southwestern Willow Flycatcher, grading or construction noise in excess of 60 decibels shall not be permitted during the breeding season of these species (mid-March to mid-September), in order to avoid impacts to potentially nesting vireos, flycatchers, and/or other riparian obligate songbirds. This restriction may be waived if directed surveys for these two species are conducted on all areas within 300 feet of the proposed activity. The results of these surveys should be provided in a report to the Director of Planning & Development Services for concurrence with the conclusions and recommendations.

M-BI-2 Increased Access Mitigation

(Impacts BI-2 and BI-6) In order to protect sensitive habitats and species, a 91.3-acre biological open space easement shall be granted over the areas shown on Figure 2-4-3, "Open Space and Fencing Plan," and on TM 5223RPL³. The onsite biological open space easement shall preclude the removal of vegetation or placement of accessory structures. A RMP shall be implemented and approved by the Director of Planning & Development Services for the biological open space easement.

The RMP shall:

- Contain provisions to ensure long-term viability of the onsite habitat and the site's resident sensitive species;
- Specify remediation as necessary, in perpetuity, to maintain habitat viability within the onsite Biological Open Space Easement.
- Include provisions to erect permanent fencing, vehicular and human access barriers, and other measures to minimize edge effects. The onsite biological open space easement is intended to preclude the removal or addition of structures and vegetation. The management of the biological open space easement shall conform to the guidelines set out in the approved RMP. In order to prevent fire clearing impacts to the biological open space easement, suitable LBZs are required. These easements shall extend outward towards development from the biological open space easement boundaries and shall prohibit the construction of houses, barns, or other habitable structures that would require fire clearing into the biological open space easement.

 Signage shall be included along the open space easement with the following language:

Sensitive Environmental Resources Area Restricted by Easement

Entry without express written permission from the County of San Diego is prohibited. To report a violation or for more information about easement restrictions and exceptions contact the County of San Diego Planning & Development Services Reference: (TM 5223)

M-BI-3 Clearing, etc., Impacts to Bird Nesting/Breeding Areas Mitigation

(Impacts BI-3 and BI-8) Clearing, grading, grubbing or tree removal shall be prohibited between January 15 and August 31 to avoid potential impact to nesting species covered under the MBTA. In lieu of avoidance, a preconstruction survey prior to clearing, grubbing or tree removal can be conducted to confirm the presence or absence of nesting birds. The survey results shall be provided to the County of San Diego, Planning & Development Services for review and approval of any proposed activity during the breeding season. Any habitat supporting nests shall be avoided, along with a suitable buffer, until a subsequent survey reveals all young have fledged.

M-BI-4 State Wetlands, Federal 'Waters' Impact Mitigation

(Impact BI-5) The County requires mitigation for impacts to "non-wetland waters of the U.S" at a 1-to-1 ratio. According the *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements – Biological Resources* (September 2010), mitigation for impacts to non-wetland waters may include onsite or offsite improvements or enhancement of water resources. The project proposes that mitigation for impacts to non-wetland water of the U.S. take place onsite, via restoration and enhancement of wetland functions and values associated with Frey Creek. Wetland mitigation activities will require the preparation and implementation of an approved Wetland Mitigation Plan.

Because the project will impact state wetlands and state and federal 'waters,' it will likely be necessary to obtain certain Regulatory Agency permits. To that end, it is recommended that the applicant provide to the Director of Planning & Development Services proof of notification of the ACOE and the California Regional Water Quality Control Board (CRWQCB) regarding Clean Water Act Section 404/401 Permits, or evidence that such notification is not required. Also recommended prior to recordation of the Final Map shall be proof provided to the Director that the applicant has obtained a 1600-series Streambed Alteration Agreement with the CDFW, or proof that such an agreement is not required. The details of any additional mitigation for impacts to jurisdictional wetlands and waterways will be established through the permitting process required to obtain 404-401 and 1600-series documents from the regulatory agencies.

M-BI-5

(Impacts BI-4 and BI-7) Impacts to 0.7 acre of F/P shall be mitigated at a 0.5-to-1 ratio. The F/P mitigation shall be preserved offsite in a County-approved location, unless out of kind mitigation is accepted for impacts to this habitat type, in which case the mitigation can be achieved within the proposed biological open space easement on the project site. The onsite F/P provides value only insofar as it provides some limited potential raptor foraging habitat, and therefore habitats that provide similar functions and values as the F/P would be suitable for such mitigation. For example, CSS or NNG will provide similar open-land raptor foraging habitat and could therefore be considered for mitigation to F/P. Offsite mitigation will take place at the Daley Ranch Conservation Bank, the Red Mountain Conservation Bank, or other County-approved location.

Impacts to 1.2 acre of CSS shall be mitigated at a 2-to-1 ratio. The unauthorized clearing of 2.3 acres of CSS shall be mitigated at a 3-to-1 ratio. Thus total mitigation requirement for CSS is 9.3 acres. The onsite biological open space easement includes 25 acres of CSS that are available for use as mitigation for project impacts. The project will therefore be able to accomplish all mitigation for impacts to CSS onsite as these acreages are in excess of the County's minimal requirements.

Impacts to 3.0 acre of CLOW shall be mitigated at a 3-to-1 ratio. The unauthorized clearing of 0.14 acres of CLOW shall be mitigated at a 4-to-1 ratio. Thus total mitigation requirement for CLOW is 9.6 acres. The onsite biological open space easement includes 7.5 acres of CLOW that are available for use as mitigation for project impacts. An additional 2.1 acres of CLOW shall be secured off site in a County-approved location.

7.1.4 Cultural Resources

M-CR- 1a: Open Space Easements:

Sites SDI-246, -266, -714, -731, and -9906 shall be placed in protected open space.

M-CR-1b: Temporary Fencing for Archaeological Sites:

A temporary fencing plan for the protection of archaeological sites CA-SDI-246, CA-SDI-266, CA-SDI-714, CA-SDI-731, and CA-SDI-9906, will be prepared and implemented during any grading activities within one hundred feet (100') of any archaeological site within open space as shown on the site plan exhibit of the archaeological study dated December 16, 2013. The fencing plan shall be prepared in consultation with a County approved archaeologist, to the satisfaction of the Director of PDS. The fenced area should include a buffer sufficient to protect the archaeological sites. The fence shall be installed under the supervision of the approved archaeologist prior to commencement of grading or brushing and be removed only after grading operations have been completed. A Native American monitor shall be present during the

installation of the fencing.

M-CR-2: Data Recovery:

Direct impacts to the archaeological component of SDI-9537/H will be mitigated through data recovery excavations that implement a written research design (Refer to the Data Recovery Program, Attachment C to this DEIR and mitigation measure below). Any site destruction grading will be monitored by both a County certified archaeologist and a Native American Observer to check for the presence of unusual features and/or human remains. All artifacts recovered from the site will be analyzed and reported on, then curated at the San Diego Archaeological Center.

Data Recovery Excavations as Mitigation

Implement, to the satisfaction of the Director of PDS, the research design detailed in the archaeological extended study, Cultural Resources Survey and Evaluation of a 286-Acre Parcel in Pauma Valley, The Shadow Run Ranch, North of State Route 76, San Diego County, California prepared by Professional Archaeological Services dated May 18, 2009. The implementation of the research design constitutes mitigation for the proposed destruction of archaeological site CA-SDI-9537H. The research design includes, but is not limited to the following performance standards:

- 1. A County-approved archaeologist will be contracted with to implement the research design. Verification of the contract shall be presented in a letter from the Project Archaeologist to the Director of PDS and shall include the requirement of a Native American Observer.
- 2. Phase 1 of the fieldwork program will include mechanical trenching and a 2.5 percent hand excavated sample of the two subsurface artifact concentrations.
- 3. At the completion of Phase 1, a letter report will be submitted to the Director of PDS. The letter report will evaluate the issues of site integrity, data redundancy, spatial and temporal patterning, features, and other relevant topics in order to assess the adequacy of the initial 2.5 percent sample. Based on this assessment, the letter report shall recommend the need for and scope of a second phase of field investigations, not to exceed a total site hand excavated sample of 5 percent of the two subsurface artifact concentrations.
- 4. Implement Phase 2 of fieldwork, as necessary.
- 5. Artifact analysis, including lithics analysis, ceramics analysis, faunal analysis, floral analysis assemblage analysis, and radiocarbon dating will be conducted, as detailed in the archaeological extended study, "Data Recovery Research Design for Mitigation of Prehistoric Archaeological Site SDI-9537/H" prepared by Philip de Barros, dated June 15, 2009.

- 6. Evidence will be provided to the satisfaction of the Director PDS that all archaeological materials recovered during both the significance testing and data recovery phases have been curated according to current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Diego County, to be accompanied by payment of the fees necessary for permanent curation.
- 7. Final Technical Report will be completed and submitted to the satisfaction of the Director of PDS.

M-CR-3: Grading Monitoring Program for Archaeological Resources:

A professional archaeologist shall be contracted to implement a grading monitor program to monitor all grading and subsurface excavation activities related to the development of the Shadow Run Ranch project. The below mitigation measure details the steps to be taken in the even subsurface archaeological deposits are uncovered, including human remain and significant features. All phases of the monitoring program shall include a Native American representative.

A County approved archaeologist shall be contracted with to implement a grading monitoring and data recovery program to the satisfaction of the Director of PDS. Verification of the contract shall be presented in a letter from the Project Archaeologist to the Director of PDS. This program shall include, but not be limited to, the following actions:

- 1. The County approved archaeologist/historian and Native American Observer shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program. The Department of PDS shall approve all persons involved in the monitoring program prior to any pre-construction meetings. The consulting archaeologist shall contract with a Native American Observer to be involved with the grading monitoring program.
- 2. During the original cutting of previously undisturbed deposits, the archaeological monitor(s) and Native American Observer shall be onsite full-time to perform periodic inspections of the excavations. The frequency of inspections will depend on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features.
- 3. Isolates and clearly non-significant deposits will be minimally documented in the field and the monitored grading can proceed.
- 4. In the event that previously unidentified potentially significant cultural resources are discovered, the archaeologist shall have the authority to divert or temporarily halt ground disturbance operation in the area of discovery to allow evaluation of

potentially significant cultural resources. The archaeologist shall contact the County Archaeologist at the time of discovery. The archaeologist, in consultation with County staff archaeologist, shall determine the significant of the discovered resources. The County Archaeologist must concur with the evaluation before construction activities will be allowed to resume in the affected area. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the consulting archaeologist and approved by the County Archaeologist, then carried out using professional methods. If any human bones are discovered, the County Coroner shall be contacted. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted in order to determine proper treatment and disposition of the remains.

- 5. Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The archaeological monitor(s) and Native American Observer shall determine the amount of material to be recovered for an adequate artifact sample for analysis.
- 6. In the event that previously unidentified cultural resources are discovered, all cultural material collected during the grading monitoring program shall be processed and curated according to current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Diego County, to be accompanied by payment of the fees necessary for permanent curating.
- 7. In the event that previously unidentified cultural resources are discovered, a report documenting the field and analysis results and interpreting the artifact and research data within the research context shall be completed and submitted to the satisfaction of the Director of PDS prior to the issuance of any building permits. The report will include Department of Parks and Recreation Primary and Archaeological Site forms.
- 8. In the event that no cultural resources are discovered, a brief letter to that effect shall be sent to the Director of PDS by the consulting archaeologist that the grading monitoring activities have been completed.
- 9. Prior to rough grading inspection sigh-off, the archaeological monitor shall provide evidence that the grading monitoring activities have been completed to the satisfaction of the Director of PDS.

M-CR-4: Curating of Archaeological Collections:

Evidence will be provided to the satisfaction of the County of San Diego, Director of PDS that all archaeological materials recovered during the Professional Archaeological Services archaeological investigations of the property, including all significance testing, data recovery, and grading monitoring activities, have been curated according to current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curating facility within San Diego County, to be accompanied by payment of the fees necessary for permanent curating.

7.1.5 Hazards and Hazardous Materials

M-HAZ-1

Should mobile homes, residences or pole-mounted transformers be demolished as part of the project, testing for ACM and LBP shall be conducted prior to demolition. If the testing confirms the presence of ACM and LBP, the materials shall be properly abated and disposed of by a state-licensed abatement contractor prior to disturbance or demolition in accordance with all federal and state requirements.

7.1.6 Geologic Resources

M-GE-1

Potential adverse impacts resulting from fault rupture will be avoided with the incorporation of appropriate setbacks from active faults consistent with the Alquist-Priolo Earthquake Fault Zoning Act. The proposed residential structures will be set back at least 50 feet from active fault traces located during trenching for the fault hazard investigation (URS, 2001). Setbacks of 100 feet will be applied in areas where the fault is located approximately based on air photo interpretation, geomorphology and published geologic maps. See Figure 2-7-1, "Setback from Fault."

M-GE-2

M-GE-2 has been included in the hard copy. Ensure the Appendix is correctly identified for the O&M Plan.

7.1.7 Noise

M-N-1

A Noise Restriction Easement shall be placed on Lots 5, 6, 15, 16, 29, and 30, requiring a future noise analysis and implementation of subsequent mitigation if two-story homes are proposed on these lots. Upon completion of precise grading plans and architectural building design specifications for these lots, a noise analysis shall be prepared to evaluate interior noise attenuation requirements. The analysis shall be completed prior to issuance of building permits for these lots. The analysis shall identify mitigation requirements to ensure interior noise levels do not exceed 45 dBA CNEL. Such measures

could include, but are not limited to, use of dual-paned windows or other architectural improvements.

M-N-2

Because the project site is considered potentially occupied by Least Bell's Vireo and Southwestern Willow Flycatcher, grading or construction noise in excess of 60 dBA shall not be permitted during the breeding season of these species (mid-March to mid-September), in order to avoid impacts to potentially nesting vireos, flycatchers, and/or other riparian obligate songbirds. This restriction may be waived if directed surveys for these two species are conducted on all areas within 300 feet of proposed grading or construction activity and it is found the birds are not present. The results of these surveys should be provided in a report to the Director of Planning and Development Services and the Wildlife Agencies for concurrence with the conclusions and recommendations.

7.1.8 Paleontology

APPROVAL OF MAP: The following condition shall be complied with before a Final Map is approved by the Board of Supervisors and filed with the County Recorder of San Diego County (and, where specifically, indicated, shall also be complied with prior to approval of any plans, and issuance of any grading or other permits as specified):

M-PA-1: PALEO GRADING MONITORING:

INTENT: In order to mitigate for potential impacts to paleontological resources on the project site, a monitoring program during grading, trenching or other excavation into undisturbed rock layers beneath the soil horizons and a fossil recovery program, if significant paleontological resources are encountered, shall be implemented pursuant to the <u>County of San Diego Guidelines for Determining Significance for Paleontological Resources</u>.

DESCRIPTION OF REQUIREMENT: A County approved Paleontologist "Project Paleontologist" shall be contracted to perform paleontological resource monitoring and a fossil recovery program if significant paleontological resources are encountered during all grading, trenching, or other excavation. The following shall be completed:

a. A County approved Paleontologist ("Project Paleontologist") shall perform the monitoring duties pursuant to the most current version of the County of San Diego Guidelines for Determining Significance for Paleontological Resources, and this permit. The contract provided to the county shall include an agreement that the grading/ trenching/excavation monitoring will be completed, and a Memorandum of Understanding (MOU) between the approved Paleontologist and the County of San Diego shall be executed. The contract shall include a cost estimate for the monitoring work and reporting.

b. The cost of the monitoring shall be added to the grading bonds that will be posted with the Department of Public Works, or bond separately with Planning & Development Services.

DOCUMENTATION: The applicant shall provide a copy of the Grading Monitoring Contract, cost estimate, and MOU. Additionally, the cost amount of the monitoring work shall be added to the grading bond cost estimate. TIMING: Prior to the approval of the map for and prior to the approval of any plan and issuance of any permit, the contract shall be provided. MONITORING: The County shall review the contract, MOU and cost estimate or separate bonds for compliance with this condition. The cost estimate shall be forwarded to [DPW, LDR], for inclusion in the grading bond cost estimate, and grading bonds. The [DPW, PC] shall add the cost of the monitoring to the grading bond costs, and the grading monitoring requirement shall be made a condition of the issuance of the grading or construction permit.

PRE-CONSTRUCTION MEETING: The following action will occur prior to Preconstruction Conference, and prior to any clearing, grubbing, trenching, grading, or any land disturbances:

M-PA-2. PALEONTOLOGICAL MONITORING:

INTENT: In order to comply with Mitigation Monitoring and Reporting Program pursuant to 3100 5223, a Paleontological Resource Grading Monitoring Program shall be implemented.

DESCRIPTION OF REQUIREMENT: The County approved Project Paleontologist, and the PDS Permit Compliance Coordinator (PCC), shall attend the pre-construction meeting with the contractors to explain and coordinate the requirements of the grading monitoring program. The Project Paleontologist shall monitor during the original cutting of previously undisturbed deposits for the project, both on and off site, the Qualified Paleontological Resources Monitor shall be on-site to monitor as determined necessary by the Qualified Paleontologist. The grading monitoring program shall comply with the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Paleontological Resources.

DOCUMENTATION: The applicant shall have the contracted Project Paleontologist attend the preconstruction meeting to explain the monitoring requirements. TIMING: Prior to Preconstruction Conference, and prior to any clearing, grubbing, trenching, grading, or any land disturbances this condition shall be completed. MONITORING: The [DPW, PDCI] shall invite the [PDS, PCC] to the preconstruction conference to coordinate the Paleontological Resource Monitoring requirements of this condition. The [PDS, PCC] shall attend the preconstruction conference and confirm the attendance of the approved Project Paleontologist.

DURING CONTRUCTION: The following actions shall occur throughout the duration of the grading construction:

M-PA-3. PALEONTOLOGICAL MONITORING:

INTENT: In order to comply with Mitigation Monitoring and Reporting Program pursuant to 3100 5223, and the <u>County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Paleontological Resources</u>, a Grading Monitoring Program shall be implemented.

DESCRIPTION OF REQUIREMENT: The Project Paleontologist shall monitor During the original cutting of previously undisturbed deposits for the project, both on and off site, the Qualified Paleontological Resources Monitor shall be on-site to monitor as determined necessary by the Qualified Paleontologist. The grading monitoring program shall comply with the following requirements during grading:

- a. If paleontological resources are encountered during grading/excavation, the following shall be completed:
 - 1. The Qualified Paleontological Resources Monitor shall have the authority to direct, divert, or halt any grading/excavation activity until such time that the sensitivity of the resource can be determined and the appropriate salvage implemented.
 - 2. The Qualified Monitor shall immediately contact the Qualified Paleontologist.
 - 3. The Qualified Paleontologist shall contact the County's Permit Compliance Coordinator immediately.
 - 4. The Qualified Paleontologist shall determine if the discovered resource is significant. If it is not significant, grading/excavation shall resume."
- b. If the paleontological resource is significant or potentially significant, the Qualified Paleontologist or Qualified Paleontological Resources Monitor, under the supervision of the Qualified Paleontologist, shall complete the following tasks in the field:
 - Salvage unearthed fossil remains, including simple excavation of exposed specimens or, if necessary, plaster-jacketing of large and/or fragile specimens or more elaborate quarry excavations of richly fossiliferous deposits;
 - 2. Record stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including a detailed description of all paleontological localities within the project site, as well as the lithology of

fossil-bearing strata within the measured stratigraphic section, if feasible, and photographic documentation of the geologic setting; and

3. Transport the collected specimens to a laboratory for processing (cleaning, curation, cataloging, etc.).

DOCUMENTATION: The applicant shall implement the grading monitoring program pursuant to this condition. TIMING: The following actions shall occur throughout the duration of the grading construction. MONITORING: The [DPW, PDCI] shall make sure that the Project Archeologist is on-site performing the Monitoring duties of this condition. The [DPW, PDCI] shall contact the [PDS, PCC] if the Project Paleontologist or applicant fails to comply with this condition.

ROUGH GRADING: The following actions shall occur prior to rough grading approval and issuance of any building permit:

M-PA-4. PALEONTOLOGICAL MONITORING:

INTENT: In order to comply with the adopted Mitigation Monitoring and Reporting Program (MMRP) pursuant to 3100 5223, and the <u>County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Paleontological Resources</u>, a Grading Monitoring Program shall be implemented.

DESCRIPTION OF REQUIREMENT: The Project Paleontologist shall prepare one of the following letters upon completion of the grading activities that require monitoring:

- a. If no paleontological resources were discovered, submit a "No Fossils Found" letter from the grading contractor to the [PDS, PCC] stating that the monitoring has been completed and that no fossils were discovered, and including the names and signatures from the fossil monitors. The letter shall be in the format of Attachment E of the County of San Diego Guidelines for Determining Significance for Paleontological Resources.
- b. If Paleontological resources were encountered during grading, a letter shall be prepared stating that the field grading monitoring activities have been completed, and that resources have been encountered. The letter shall detail the anticipated time schedule for completion of the curation phase of the monitoring.

DOCUMENTATION: The applicant shall submit the letter report to the [*PDS*, *PCC*] for review and approval. TIMING: Upon completion of all grading activities, and prior to Rough Grading final Inspection (Grading Ordinance SEC 87.421.a.2), the letter report shall be completed. MONITORING: The [*PDS*, *PCC*] shall review the final negative letter report or field monitoring memo for compliance with the project MMRP, and inform [DPW, PDCI] that the requirement is completed.

FINAL GRADING RELEASE: The following actions shall occur prior to any occupancy, final grading release, or use of the premises in reliance of this permit:

M-PA-5. PALEONTOLOGICAL MONITORING:

INTENT: In order to comply with the adopted Mitigation Monitoring and Reporting Program (MMRP) pursuant to 3100 5223, and the <u>County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Paleontological Resources</u>, a Grading Monitoring Program shall be implemented.

DESCRIPTION OF REQUIREMENT: The Project Paleontologist shall prepare a final report that documents the results, analysis, and conclusions of all phases of the Paleontological Monitoring Program if resources were encountered during grading. The report shall include the following:

- a. If paleontological resources were discovered, the Following tasks shall be completed by or under the supervision of the Project Paleontologist:
 - 1. Prepare collected fossil remains for curation, to include cleaning the fossils by removing the enclosing rock material, stabilizing fragile specimens using glues and other hardeners, if necessary, and repairing broken specimens;
 - 2. Curate, catalog and identify all fossil remains to the lowest taxon possible, inventory specimens, assigning catalog numbers, and enter the appropriate specimen and locality data into a collection database;
 - 3. Submit a detailed report prepared by the Project Paleontologist in the format provided in Appendix D of the County of San Diego's Guidelines for Determining Significance for Paleontological Resources and identifying which accredited institution has agreed to accept the curated fossils. Submit TWO hard copies of the final Paleontological Resources Mitigation Report to the Director of PDS for final approval of the mitigation, and submit an electronic copy of the complete report in Microsoft Word on a CD. In addition, submit one copy of the report to the San Diego Natural History Museum and one copy to the institution that received the fossils.
 - 4. Transfer the cataloged fossil remains and copies of relevant field notes, maps, stratigraphic sections, and photographs to an accredited institution (museum or university) in California that maintains paleontological collections for archival storage and/or display, and submit Proof of Transfer of Paleontological Resources, in the form of a letter, from the director of the paleontology department of the accredited institution to the Director of PDS verifying that the curated fossils from the project site have been received by the institution."
- b. If no resources were discovered, a brief letter to that effect and stating that the grading monitoring activities have been completed, shall be sent to the Director of Planning and Land Use by the Project Paleontologist.

DOCUMENTATION: The applicant shall submit the letter report to the [PDS, PCC] for review and approval. TIMING: Prior to the Final Grading Release (Grading Ordinance Sec. 87.421.a.3), the final report shall be completed. MONITORING: The [PDS, PCC]

shall review the final report for compliance with the project MMRP, and inform [DPW, PDCI] that the requirement is completed.

7.1.9 Traffic

M-TR-1

Prior to the issuance of building permits, the proposed project shall participate in the County's Transportation Impact Fee (TIF) program by paying applicable development fees.

7.2 Design Considerations

7.2.1 Aesthetics

The PRD section of the project will use design considerations to reduce the potential impacts to visual resources. These design considerations include maintaining the screening vegetation currently in place along the right-of-way of SR 76. Additionally, placement of pads on lots 5, 6, 15, 16, and 17 will be away from the roadway, allowing for the retention of groves along SR 76.

7.2.2 Hazards and Hazardous Materials

7.2.2.1 Fire Hazards

- Protection Plan. Zone 1 is the defensible space zone and encompasses the pads and surrounding grove on each lot. This zone will be cleared of existing vegetation, replanted with drought-tolerant and irrigated lawn, and will be irrigated. Zone 1 will incorporate vegetation setbacks of 25 feet from the building pad. Zone 2 begins at the outer edge of Zone 1 is the area between 50 and 100 feet from the edge of the buildable pad. Within Zone 2 all flammable native plants will be removed and may be replanted with low growing and low fuel volume "ground cover" vegetation or native grasses and occasional well-spaced low growing fire resistant shrubs. Maintenance will be on-going throughout the year as needed. Zone 3 will require a 30 foot thinning zone along project roadways. The site's access roads will be provided with 30-foot fuel modification. Site access roads will receive Fuel Modification to a total of 20 feet. Interior roadways treatment will be 30 ft. off the edge of the road bed.
- All structures will be built to current code requirements. Requirements provide for ignition resistant construction standards and NFPA compliant automatic

- sprinkler system. Appendix E of the FPP provides the most critical elements to protect the structure from ember intrusion during a catastrophic wildfire event.
- Building pads will be carved out of the existing grove area. The entire parcel
 will be treated as an irrigated zone. The grove area had a high maintenance
 standard at the time of the site visit with no trimmings or extensive leaf litter
 evident.
- The FPP its recommendations shall be incorporated by reference into the final project conditions of approval to ensure compliance with codes/regulations and significance standards. The FPP also sets forth a requirement to manage and control invasives (exotics) in open space easements.
- Each lot owner is personally responsible for all fuel treatment measures within their property lot(s). Where these zones extend onto an adjoining lot within the development, the lot owner benefiting from the fuel treatment shall be allowed to perform the work on the adjacent property.
- All roadside fuel treatment within the subdivision is the maintenance responsibility of the HOA.
- Trash dumping or disposal of yard trimmings in the fuel treatment zones shall not be allowed.
- The Fuel Treatment Zones, as depicted on the Fuel Treatment Map in the FPP, shall be recorded against all lots
- All individual plans for additional structures, where allowed, shall be approved by the Fire Marshal and will comply with the FPP. There will be a fee to check these plans.
- Trees shall be placed and maintained so that their crown cover at maturity will be more than ten feet from any structure.
- All plants will be in accordance with the San Diego County Recommended Plant List or as approved by the San Diego County Fire Marshal.
- Upon the sale of a lot to a new owner, a copy of the FPP shall be provided as a condition of the sale.
- The San Diego County Fire Chief will be the enforcing agency official should the requirements of this plan be dismissed. Through the enforcing agency, abatement processes will be used to take corrective action if needed.
- If the landowner is aware of any state or federal listed species on their property, the USFWS should be notified prior to the abatement.

- Debris and trimmings produced by thinning and pruning will be removed from the site, or, if left, shall be converted into mulch and evenly dispersed to a maximum depth of four inches. Such trimmings will not be within 50 feet of structures.
- Any damaged or replacement window, siding, roof coverings, and specific noncombustible wall will meet or exceed the original intent of the fire protection discussed in this plan.

All structures will be required to meet the standards set in the San Diego County Building Code:

- All structures will be built with a Class A Roof Assembly, including a Class A roof covering, and attic or foundation ventilation louvers or ventilation openings in vertical walls shall not exceed 144 square inches per opening and shall be covered with 1/8th-inch mesh corrosion-resistant metal screening or other approved material that offers equivalent protection. Attic ventilation shall also comply with the requirements of the Uniform Building Code (U.B.C.). Ventilation louvers and openings may be incorporated as part of access assemblies.
- Where the roof profile allows a space between the roof covering and roof
 decking, the spaces shall be constructed to prevent the intrusion of flames and
 embers, be firestopped with approved materials or have one layer of No. 72
 ASTM cap sheet installed over the combustible decking.
- When provided, exposed valley flashings shall be not less than 0.019-inch (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide underlayment consisting of one layer of No. 72 ASTM cap sheet running the full length of the valley.
- Paper-faced insulation shall be prohibited in attics or ventilated spaces.
- All glass or other transparent, translucent or opaque glazing materials including skylights shall be constructed multi-layered glazed panels one layer of which must be tempered glass. No skylights will be allowed on the roof assembly facing hazardous vegetation.
- Exterior windows, window walls, glazed doors, and glazed openings within exterior doors shall be insulating-glass units with a minimum of one tempered pane, or glass block units, or have a fire resistance rating of not less than 20 minutes, when tested according to ASTM E 2010, or conform to the performance requirements of SFM 12-7A-2.
- All windows shall be provided with 1/8 inch mesh metal or similar noncombustible screens to prevent embers from entering the structure during high SHADOW RUN RANCH TM 5223RPL³ - DEIR

wind conditions.

- The exterior walls surface materials shall be non-combustible or an approve alternate. In all construction, exterior walls are required to be protected with 2-inch nominal solid blocking between rafters at all roof overhangs.
- Combustible eaves, fascias and soffits shall be enclosed. Eaves of heavy timber construction are not required to be enclosed as long as attic venting is not installed in the eaves. For the purposes of this section heavy timber construction shall consist of a minimum of 4x6 rafter ties and 2x decking.
- No attic ventilation openings or ventilation louvers shall be permitted in soffits, in eave overhangs, between rafters at eaves, or in other overhanging areas.
- All projections (exterior balconies, decks, patio covers, unenclosed roofs and floors, and similar architectural appendages and projections) or structures less than five feet from a building shall be of non-combustible material, one-hour fire resistive construction on the underside, heavy timber construction or pressure-treated exterior fire-retardant wood. When such appendages and projections are attached to exterior fire-resistive walls, they shall be constructed to maintain same fire-resistant standards as the exterior walls of the structure.
- Exterior doors shall be approved non-combustible construction, solid core wood and shall conform to the performance requirements of standard SFM 12-7A-1 or shall be of approved noncombustible construction, or solid core wood having stiles and rails not less than 1¾ inches thick with interior field panel thickness no less than 1¼ inches thick, or shall have a fire-resistance rating of not less than 20 minutes when tested according to ASTM E2074.
- Roof vents, dormer vents, gable vents, foundation ventilation openings, ventilation openings in vertical walls, or other similar ventilation openings shall be louvered and covered with 1/4-inch, noncombustible, corrosion-resistant metal mesh or other approved material that offers equivalent protection. Turbine attic vents shall be equipped to allow, one-way direction rotation only; they shall not free spin in both directions.
- All chimney, flue or stovepipe openings will have an approved spark arrester. An approved spark arrester is defined as a device constructed of nonflammable materials, 12 gauge minimum thicknesses or other material found satisfactory by the Fire Protection District, having ½-inch perforations for arresting burning carbon or sparks. It shall be installed to be visible for the purposes of inspection and maintenance.

- All rain gutters, down spouts and gutter hardware shall be constructed from metal or other noncombustible material to prevent wildfire ignition along eave assemblies.
- Gutters shall be provided with the means to prevent the accumulation of leaf litter and debris that contribute to roof edge ignition.
- All side yard fence and gate assemblies (fences, gate and gate posts) when attached to the home shall be of non-combustable material. The first five feet of fences and other items attached to a structure shall be of non-combustible material.
- All homes shall be sprinklered. The Interior Sprinkler System shall meet National Fire Protection Standard NFPA13 <u>Installation of Sprinkler Systems in Residential Occupancies</u>.

7.2.3 Geologic Resources

Potential adverse impacts resulting from seismic ground shaking will be avoided by implementing appropriate design measures which are standard in Southern California. Use of 2007 Uniform Building Code (UBC) design measures will address structural design requirements for residential buildings and other structures that will safeguard against major structural damage and loss of life. Use of the appropriate design and construction methods will allow for ground shaking hazards to be avoided.

The project will conform to the County of San Diego Grading Ordinance which requires erosion control measures during and after construction. For example, the revegetation of manufactures slopes over three feet in height is required. A Concept Landscape Plan has been provided (Figure 1-2C) which provides for slope plantings. Drainage for the project has been analyzed and a Stormwater Management Plan (SWMP) has been proposed which calls for BMPs that will help control erosion with grassy swales. Graded areas have been minimized. Substantial areas of the existing grove will be left intact and will be maintained, which will aid in the retention of topsoil. The project design prevents substantial soil erosion and loss of topsoil by controlling graded surfaces and leaving existing groves in place.

To ensure ongoing safe operation of the reservoir, an operations and maintenance plan will be implemented. The plan will require inspection, reporting, and repair of reservoir features that are functioning in a less than optimal manner.

7.2.4 Noise

A 100 foot wide citrus grove along SR 76 will remain. It will encompass parts of lots 5, 6, 15, 16, and 30, as shown on the tentative map for the project.

7.2.5 Agricultural Resources

A 39.2 agricultural open space area is proposed which will be maintained and managed such that no activity other than agriculture will be permitted in this area.

A non-potable water system will be installed in addition to the potable water system and will be used to provide irrigation to residential lots.

Prospective lot purchasers will be notified of the existing of ongoing agriculture in the area. Notifications will be:

Agricultural operations are located throughout the unincorporated area of San Diego County and are often conducted on relatively small parcels. The subject property is also located in the unincorporated area and, as such, is likely to be located near an agricultural enterprise, activity, operation, or facility or appurtenances thereof (collectively, "agricultural use"). Occupants of the property to be purchased may be exposed to inconveniences, irritations or discomforts arising from the agricultural use, including but not limited to noise, odors, fumes, dust, smoke, insects, rodents, the operation of machinery of any kind (including aircraft) during any 24 hour period, the storage and disposal of manure, and the application by spraying or other means of agricultural chemicals, such as pesticides and fertilizers. Purchasers of the property may be required to accept such inconveniences, irritations and discomforts, unless the agricultural use constitutes a public or private nuisance under the provisions of Section 3482.5 of the Civil Code or Section 63.403 of the San Diego County Code. The agricultural use may be altered or expanded in the future.

As related to pesticides:

The subdivider shall provide evidence satisfactory to the Director of Planning & Development Services that an application for a Final Public Report has been submitted to the State of California, Department of Real Estate that discloses that there will be hazards or unusual conditions in or near this subdivision related to surrounding agricultural uses. The application must fully disclose to potential purchasers of the property all inconveniences and irritations arising from agricultural operations including, but not limited to the following: cultivation, plowing, spraying, pruning, harvesting, drying, crop protection from the elements or depredation which generates dust, smoke, noise, insects, rodents, and odor, and the use of agricultural chemicals, including but not limited to herbicides, insecticides, fungicides, rodenticides, and fertilizers.

7.2.6 Hydrology/Water Quality

The project has been designed to comply with regulations set forth in the WPO.

The Proposed Project will comply with the Stormwater Management Plan (SWMP) that describes implementation of Best Management Practices (BMPs) that address issues of Site Design; Low Impact Development requirements; Construction and Post-Construction operations, Source Controls, and Treatment Controls.